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ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY CLASS I PERMIT

COMPANY NAME:	Arizona Public Service Company
FACILITY NAME:	Fairview Generating Station
PERMIT NUMBER:	1000149
DATE ISSUED:	January 25, 1999
EXPIRY DATE:	January 25, 2004

SUMMARY

This operating permit is issued to Arizona Public Service Company (APS), the Permittee, for operation of their Fairview Generating Station, located one mile north of Highway 80 on Sulphur Springs Road in Douglas, Cochise County, Arizona.

The Fairview station is solely owned and operated by APS. The station has a simple cycle combustion turbine unit, which provides power to the electric grid on an as-needed basis, primarily during emergency situations such as interruption of the main power lines. The station was placed into commercial operation on May 31, 1972 and has the capacity to generate 20.95 MW with either diesel, also known as No. 2 fuel oil, or natural gas. There is no air pollution control equipment installed on the turbine engine. The startup diesel engine burns only diesel fuel and is rated at 500 hp. The fuel oil is delivered to the station by trucks and held in a storage tank with a total capacity of 20,000 barrels. Natural gas is delivered by pipeline.

All definitions, terms, and conditions used in this permit conform to those in the Arizona Administrative Code R18-2-101 et. seq. (A.A.C.) and 40 Code of Federal Regulations (CFR), except as otherwise defined in this permit. Unless noted otherwise, references cited in the permit conditions refer to the A.A.C. All terms and conditions of this permit are enforced by the Administrator of the U.S. EPA except for those terms and conditions that are specifically designated as "State Requirements".

APS Fairview is a “major source”. The potential emission rates of the following pollutants are greater than 100 tons per year: (i) sulfur dioxide, (ii) nitrogen oxides and (iii) carbon monoxide. This permit is issued in accordance with Title V of the Clean Air Act, and Title 49, Chapter 3 of the Arizona Revised Statutes. Applicable requirements for the operations at the Fairview Station are listed in Attachment “C” of this permit.

TABLE OF CONTENTS

Table 1: Summary of Permit Requirements[a]

Emission Unit	Pollutant	Control Measure	Standards Limitations	Monitoring/ Record Keeping	Reporting	Testing Methods
POINT SOURCES **P1. Combustion Turbine** Fuel: Fuel Oil #2 and Natural Gas **P2. Startup Diesel Engine** Fuel: Diesel [A.A.C. R18-2-719]	SO_2	No controls installed	Fuel sulfur content ≤ 0.90% Stack SO_2 ≤ 1.0 lb/mm Btu (Low sulfur fuel)	Keep on record name of oil supplier, sulfur content, heating value and density of oil from which the shipment came. Keep on record engineering calculations showing SO_2 emissions in lbs/MMBtu	Report to the Director any daily period during which the sulfur content of the fuel exceeds 0.8 percent.	See Equation in Attachment "B", Section II.A.1.b
	PM	No controls installed	$PM \leq 1.02Q^{0.769}$ lbs/hr where Q=heat input (mm Btu/hr)	Keep on record the pipeline specification sheet indicating: higher heating value and ash content.	--	--
	Opacity	No controls installed	≤ 40% for any period > 10 consecutive seconds except for first ten minutes after cold starting.	--	Opacity Observation results.	Observe at least one stack opacity reading during each 168 hour period of continuous fuel burning. Only one reading is required if the burning lasts longer than 72 hours but shorter than 168 hours. Reference Method 9
	NOx	No controls installed	**	--	--	Test the turbine for NOx after 968 cumulative hours of operation. Reference Method 20
	CO	No controls installed	**	--	--	Test the turbine at same time nitrogen oxides test is performed. Reference Method 10

FUGITIVE SOURCES **F1. Non-point Sources** a. Unused open areas [A.A.C. R18-2-604.A]	Opacity	Dust suppressant or wetting agent, paving, covering, or detouring	≤ 40%	Date and type of activity. Type of control used.	--	--
b. Open area construction, reparation, etc. and earth excavation [A.A.C. R18-2-604.A]	Opacity	Dust suppressant or wetting agent	≤ 40%	Date and type of activity. Type of control used.	--	--
c. Roadway construction, repair or reconstruction [A.A.C. R18-2-605.A]	Opacity	Dust suppressant or wetting agent	≤ 40%	Date and type of activity. Type of control used.	--	--
d. Material transportation [A.A.C. R18-2-605.B]	Opacity	Covering, dust suppressant or wetting agent	≤ 40%	Date and type of activity. Type of control used.	--	--
e. Material Handling [A.A.C. R18-2-606]	Opacity	Covering, dust suppressant or wetting agent	≤ 40%	Date and type of activity. Type of control used	--	--
f. Storage Piles [A.A.C. R18-2-607.A]	Opacity	Covering, dust suppressant or wetting agent	≤ 40%	Date and type of activity. Type of control used.	--	--
g. Stacking and reclaiming machinery at storage piles [A.A.C. R18-2-607.B]	Opacity	Minimize fall, dust suppressant or wetting agent	≤ 40%	Date and type of activity. Type of control used.	--	--
h. Cleaning of site and roadway [A.A.C. R18-2-804.A&B]	Opacity	Wetting agent or dust suppressant	≤ 40%	Date and duration of project and control measure used	--	--
F2 Abrasive Blasting [A.A.C R18-2-726 & 702.B]	Opacity	Wet blasting; enclosure with dust collection device.	≤ 40%	Wet blasting; enclosure with dust collection device.	--	--

F3. Spray Painting [A.A.C. R18-2-727, 702.B and SIP R9-3-527.C]	VOC	Enclosures containing at least 96% of overspray except for architectural coating and spray painting, dispose of <1.5 gallons through evaporation	**	--	--	--
	Opacity	Not required	≤ 40%	--	--	--
F4. Solvent Cleaners /Degreasers [A.A.C. R18-2-730.F]	VOCs	Install means to reduce air pollution from evaporation, leakage, or discharge of solvents being processed, stored, used, or transported.	**	--	--	--
F5. Demolition/ Renovation [A.A.C. R18-2-1101.A.8]	Asbestos	As required by rule	As required by rule	Relevant paperwork on file	--	--

Note: [a] Table 1 summarizes certain requirements applicable to Fairview operations. It is intended for reference use only. The enforceable terms and conditions of this permit are contained in Attachments A-E of this permit.

** No limits established

-- Not Required

ATTACHMENT "A": GENERAL PROVISIONS

Air Quality Control Permit No. 1000149
For
Arizona Public Service Company - Fairview Generating Station

I. PERMIT EXPIRATION AND RENEWAL [A.R.S. § 49-426.F, A.A.C. R18-2-304.C.2 and 306.A.1]

A. This permit is valid for a period of five years from the date of issuance of the permit.

B. The Permittee shall submit an application for renewal of this permit at least 6 months, but not more than 18 months prior to the date of permit expiration.

II. COMPLIANCE WITH PERMIT CONDITIONS [A.A.C. R18-2-306.A.8.a and b, ARS §49-463, ARS §49-464]

A. The Permittee shall comply with all conditions of this permit including all applicable requirements of Arizona air quality statutes and the air quality rules. Any permit noncompliance constitutes a violation of the Arizona Revised Statutes and is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. In addition, noncompliance with any federally enforceable requirement constitutes a violation of the Clean Air Act.

B. Need to halt or reduce activity not a defense. It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

III. PERMIT REVISION, REOPENING, REVOCATION AND REISSUANCE, OR TERMINATION FOR CAUSE [A.A.C. R18-2-306.A.8.c, 321.A]

A. The permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, or termination; or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

B. The permit shall be reopened and revised under any of the following circumstances:

1. Additional applicable requirements under the Act become applicable to the Class I source. Such reopening shall only occur if there are three or more years remaining in the permit term. The reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to R18-2-322(B). Any permit revision required pursuant to this subparagraph shall comply with provisions in R18-2-322 for permit renewal and shall reset the five year permit term.

2. Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the Class I permit.

3. The Director or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

4. The Director or the Administrator determines that the permit needs to be revised or revoked to assure compliance with the applicable requirements.

C. Proceedings to reopen and issue a permit, including appeal of any final action relating to a permit reopening, shall follow the same procedures as apply to initial permit issuance and shall, except for reopenings under paragraph 1 above, affect only those parts of the permit for which cause to reopen exists. Such reopenings shall be made as expeditiously as practicable. Permit reopenings for reasons other than those stated in paragraph III.B.1 of this Attachment shall not result in a resetting of the five year permit term.

IV. POSTING OF PERMIT [A.A.C. R18-2-315]

A. Permittee shall post such permit, or a certificate of permit issuance where the facility is located in such a manner as to be clearly visible and accessible. All equipment covered by the permit shall be clearly marked with one of the following:

1. Current permit number.
2. Serial number or other equipment number that is also listed in the permit to identify that piece of equipment.

B. A copy of the complete permit shall be kept on the site.

V. FEE PAYMENT [A.A.C. R18-2-326, 306.A.9.]

Permittee shall pay fees to the Director pursuant to A.R.S. § 49-426(E) and A.A.C. R18-2-326.

VI. ANNUAL EMISSIONS INVENTORY QUESTIONNAIRE [A.A.C. R18-2-327]

A. Permittee shall complete and submit to the Director an annual emissions inventory questionnaire. The questionnaire is due by March 31 or ninety days after the Director makes the inventory form available each year, whichever occurs later, and shall include emission information for the previous calendar year.

B. The questionnaire shall be on a form provided by the Director and shall include the information required by A.A.C. R18-2-327.

VII. COMPLIANCE CERTIFICATION

A. Permittee shall submit a compliance certification to the Director twice each year, which describes the compliance status of the source with respect to each permit condition. The first certification shall be

submitted no later than April 15th, and shall report the compliance status of the source during the period between September 16th of the previous year, and March 15th of the current year. The second certification shall be submitted no later than October 15th, and shall report the compliance status of the source during the period between March 16th and September 15th of the current year.
[A.A.C. R18-2-309.2.a]

The compliance certifications shall include the following:

1. Identification of each term or condition of the permit that is the basis of the certification;
[A.A.C. R18-2-309.2.c.i]

2. Compliance status with each applicable requirement; [A.A.C. R18-2-309.2.c.ii]

3. Whether compliance was based on continuous or intermittent data; [A.A.C. R18-2-309.2.c.iii]

4. Method(s) used for determining the compliance status of the source, currently and over the reporting period; [A.A.C. R18-2-309.c.iv]

5. All instances of deviations from permit requirements reported pursuant to Section XII.B of this Attachment; and [A.A.C. R18-2-306.A.5.a]

6. A progress report on all outstanding compliance schedules submitted pursuant to Section XII.D of this Attachment. Progress reports submitted with compliance certifications satisfy the reporting requirements of A.A.C. R18-2-309.5.d. [A.A.C. R18-2-309.5.d]

B. A copy of all compliance certification for Class I permits shall also be submitted to the EPA Administrator. [A.A.C. R18-2-309.2.d]

VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS [A.A.C. R18-2-309.3]

Any document required to be submitted by this permit, including reports, shall contain a certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this part shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

IX. INSPECTION AND ENTRY [A.A.C. R18-2-309.4]

The Permittee shall allow the Director or the authorized representative of the Director upon presentation of proper credentials to:

A. Enter upon the Permittee's premises where a source is located or emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;

B. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;

C. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control

equipment), practices, or operations regulated or required under the permit;

D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and

E. Record any inspection by use of written, electronic, magnetic and photographic media.

X. PERMIT REVISION PURSUANT TO FEDERAL HAZARDOUS AIR POLLUTANT STANDARD

If this source becomes subject to a standard promulgated by the Administrator pursuant to section 112(d) of the Act, then the Permittee shall, within twelve months of the date on which the standard is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard.

[A.A.C. R18-2-304.C]

XI. ACCIDENTAL RELEASE PROGRAM

If this source becomes subject to a standard promulgated by the Administrator pursuant to Section 112(r) of the Act, then the Permittee shall comply with all the applicable requirements of the standard immediately. [40 CFR 68]

XII. REPORTING OF EXCESS EMISSIONS, PERMIT DEVIATIONS, AND EMERGENCIES

A. EXCESS EMISSIONS REPORTING [A.A.C R18-2-310.C]

1. Excess emissions, as defined in A.A.C. R18-2-101.37, shall be reported as follows:

   a. The Permittee shall report to the Director any emissions in excess of the limits established by this permit. Such report shall be in two parts as specified below:

      (1) Notification by telephone or facsimile within 24 hours of the time when the Permittee first learned of the occurrence of excess emissions including all available information from paragraph b. of this subsection.

      (2) Detailed written notification within 72 hours of the notification pursuant to subparagraph (1) of this paragraph.

   b. Report shall contain the following information:

      (1) Identity of each stack or other emission point where the excess emissions occurred.

      (2) Magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions.

      (3) Date, time and duration or expected duration of the excess emissions.

      (4) Identity of the equipment from which the excess emissions emanated.

      (5) Nature and cause of such emissions.

(6) If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions.

(7) Steps taken to limit the excess emissions.

2. In the case of continuous or recurring excess emissions, the notification requirements of this section shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in such notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period or changes in the nature of the emissions as originally reported shall require additional notification pursuant to subsection A.1.a.(2) of this Section. [A.A.C. R18-2-310.D]

3. It shall be the burden of the Permittee to demonstrate, through submission of the data and information required by Section XII.A of Attachment "A", that all reasonable and practicable measures within the Permittee's control were implemented to prevent the occurrence of excess emissions. [A.A.C. R18-2-310.B]

B. PERMIT DEVIATIONS REPORTING [A.A.C. R18-2-306.A.5]

1. A deviation means any situation in which an emissions unit fails to meet a permit term or condition. A deviation is not always a violation. A deviation can be determined through observation or through review of data obtained from any testing, monitoring, or recordkeeping established in this permit. For a situation lasting more than 24 hours which constitutes a violation, each 24 hour period is considered a separate deviation. Included in the meaning are any of the following:

   a. A situation where emissions exceeded an emission limitation or standard;
   b. A situation where process or control device parameter values indicate that an emission limitation or standard has not been met;
   c. A situation in which observations or data collected demonstrates noncompliance with an emission limitation or standard or any work practice or operating condition required by the permit.

2. Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. Prompt reporting shall mean that the report was submitted to the Director by certified mail, facsimile, or hand delivery within two working days of the time the deviation occurred.

C. EMERGENCY PROVISION [A.A.C. R18-2-306.E]

1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

   a. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of paragraph (b) of this subsection are met.

b. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An emergency occurred and that the permittee can identify the cause(s) of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and

(4) The permittee submitted notice of the emergency to the Director by certified mail, facsimile, or hand delivery within two working days of the time when emission limitations were exceeded due to the emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

c. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

d. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

D. For any excess emission or permit deviation that cannot be corrected within 72 hours, the Permittee is required to submit a compliance schedule to the Director within 21 days of such occurrence. The compliance schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with the permit terms or conditions that have been violated.

XIII. RECORD KEEPING REQUIREMENTS [A.A.C. R18-2-306.A.4]

A. Permittee shall keep records of all required monitoring information including, but not limited to, the following:

1. The date, place as defined in the permit, and time of sampling or measurements;

2. The date(s) analyses were performed;

3. The name of the company or entity that performed the analyses;

4. A description of the analytical techniques or methods used;

5. The results of such analyses; and

6. The operating conditions as existing at the time of sampling or measurement.

B. Permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings or other

data recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

XIV. REPORTING REQUIREMENTS [A.A.C. R18-2-306.A.5.a]

Permittee shall submit the following reports :

1. Compliance certifications in accordance with Section VII of Attachment "A".

2. Permit deviation, emergency provision and excess emission reports in accordance with Section XII of Attachment "A".

3. Other reports required by Section II of Attachment "B".

XV. DUTY TO PROVIDE INFORMATION [A.A.C. R18-2-304.G and 306.A.8.e]

A. The Permittee shall furnish to the Director, within a reasonable time, any information that the Director may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the Director copies of records required to be kept by the permit. For information claimed to be confidential, the Permittee shall furnish an additional copy of such records directly to the Administrator along with a claim of confidentiality.

B. If the Permittee has failed to submit any relevant facts or if the Permittee has submitted incorrect information in the permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

XVI. PERMIT AMENDMENT OR REVISION [A.A.C. R18-2-318, 319 and 320]

Permittee shall apply for a permit amendment or revision for changes to the facility which do not qualify for a facility change without revision under Section XVII, as follows:

A. Administrative Permit Amendment (A.A.C. R18-2-318);

B. Minor Permit Revision (A.A.C. R18-2-319);

C. Significant Permit Revision (A.A.C. R18-2-320).

The applicability and requirements for such action are defined in the above referenced regulations.

XVII. FACILITY CHANGE WITHOUT PERMIT REVISION [A.A.C. R18-2-317]

A. Permittee may make changes at the permitted source without a permit revision if all of the following apply:

1. The changes are not modifications under any provision of Title I of the Act or under A.R.S. § 49-401.01(18).

2. The changes do not exceed the emissions allowable under the permit whether expressed therein as a rate of emissions or in terms of total emissions.

3. The changes do not violate any applicable requirements or trigger any additional applicable requirements.

4. The changes satisfy all requirements for a minor permit revision under R18-2-319(A).

5. The changes do not contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements.

B. The substitution of an item of process or pollution control equipment for an identical or substantially similar item of process or pollution control equipment shall qualify as a change that does not require a permit revision, if it meets all of the requirements of subsections (A) and (C) of this Section.

C. For each such change under subsections A and B of this Section, a written notice by certified mail or hand delivery shall be received by the Director and, for Class I permits, the Administrator, a minimum of 7 working days in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided less than 7 working days in advance of the change but must be provided as far in advance of the change as possible or, if advance notification is not practicable, as soon after the change as possible. Each notification shall include:

   a. When the proposed change will occur.

   b. A description of each such change.

   c. Any change in emissions of regulated air pollutants.

   d. The pollutants emitted subject to the emissions trade, if any.

   e. The provisions in the implementation plan that provide for the emissions trade with which the source will comply and any other information as may be required by the provisions in the implementation plan authorizing the trade.

   f. If the emissions trading provisions of the implementation plan are invoked, then the permit requirements with which the source will comply.

   g. Any permit term or condition that is no longer applicable as a result of the change.

XVIII. TESTING REQUIREMENTS [A.A.C. R18-2-312]

A. Operational Conditions During Testing

Tests shall be conducted during operation at the maximum possible capacity of each unit under

representative operational conditions unless other conditions are required by the applicable test method or in this permit. With prior written approval from the Director, testing may be performed at a lower rate. Operations during start-up, shutdown, and malfunction (as defined in A.A.C. R18-2-101) shall not constitute representative operational conditions unless otherwise specified in the applicable standard.

B. Performance tests shall be conducted and data reduced in accordance with the test method and procedures contained in the Arizona Testing Manual unless modified by the Director pursuant to A.A.C. R18-2-312.B.

C. Test Plan

At least 14 calendar days prior to performing a test, the owner or operator shall submit a test plan to the Director, in accordance with A.A.C. R18-2-312.B and the Arizona Testing Manual. This test plan must include the following:

1. test duration;
2. test location(s);
3. test method(s); and
4. source operation and other parameters that may affect test results.

D. Stack Sampling Facilities

Permittee shall provide or cause to be provided, performance testing facilities as follows:

1. Sampling ports adequate for test methods applicable to the facility;
2. Safe sampling platforms;
3. Safe access to sampling platforms; and
4. Utilities for sampling and testing equipment.

E. Interpretation of Final Results

Each performance test shall consist of three separate runs using the required test method. Each run shall be conducted in accordance with the applicable standard and test method. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. If a sample is accidentally lost or conditions occur which are not under the Permittee's control and which may invalidate the run, compliance may, upon the Director's approval, be determined using the arithmetic mean of the other two runs. If the Director, or Director’s designee, is present, tests may only be stopped with the Director’s or such designee’s approval. If the Director or the Director's designee is not present, tests may only be stopped for good cause. Good cause includes, forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions or other conditions beyond the Permittee's control. Termination of any test without good cause after the first run is commenced shall constitute a failure of the test. Supporting documentation which demonstrates good cause must be submitted.

F. Report of Final Test Results

A written report of the results of all performance tests shall be submitted to the Director within 30 days after the test is performed. The report shall be submitted in accordance with the Arizona Testing Manual and A.A.C. R18-2-312.A.

XIX. PROPERTY RIGHTS [A.A.C. R18-2-306.A.8.d]

This permit does not convey any property rights of any sort, or any exclusive privilege.

XX. SEVERABILITY CLAUSE [A.A.C. R18-2-306.A.7]

The provisions of this permit are severable. In any event of a challenge to any portion of this permit, or any portion of this permit is held invalid, the remaining permit conditions remain valid and in force.

XXI. PERMIT SHIELD [A.A.C. R18-2-325]

Compliance with the conditions of this permit shall be deemed compliance with the applicable requirements identified in Attachment "C" of this permit. The permit shield shall not apply to any changes made pursuant to Section XVI.B of this Attachment and Section XVII of this Attachment.

ATTACHMENT "B": SPECIFIC CONDITIONS

Air Quality Control Permit No. 1000149

For

Arizona Public Service Company - Fairview Generating Station

I. EMISSION LIMITS/ STANDARDS

A. G.E. Simple Cycle Combustion Turbine (S/N 214472) and Startup Diesel Engine

1. Particulate Matter Standard [A.A.C. R18-2-719.C.1]

Permittee shall not cause, allow or permit the emission of particulate matter, caused by combustion of fuel, from any stacks of the unit in excess of the maximum allowable emissions determined by the following equation:

$E = 1.02\ Q^{0.769}$

where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

Q = the heat input in million Btu per hour.

2. Sulfur Dioxide Standard

Permittee shall not cause, allow, or permit emissions of more than 1.0 pound of sulfur dioxide per million Btu heat input. [A.A.C. R18-2-719.F]

3. Opacity Standard

Permittee shall not cause, allow or permit to be emitted into the atmosphere from the turbine, smoke for any period of time greater than ten consecutive seconds which exceeds 40 percent opacity. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes. [A.A.C. R18-2-719.E]

4. Fuel Limitation

a. Permittee shall burn only the following fuels in the turbine:
   (i) Fuel Oil #2,
   (ii) Natural Gas. [A.A.C. R18-2-306.A.2]

b. Permittee shall burn only diesel in the startup diesel engine. [A.A.C. R18-2-306.A.2]

c. Permittee shall not burn high sulfur oil (fuel sulfur content ≥ 0.90% by weight) in the turbine. [A.A.C. R18-2-719.H]

5. Definition of Heat Input

For the purpose of conditions I.A.1 and I.A.2 of this Attachment, "heat input" is defined as the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet. [A.A.C. R18-2-719.B]

B. Non-Point Sources

1. Open Areas, Roadways & Streets, Storage Piles, and Material Handling

a. Permittee shall not cause, allow or permit visible emissions from open areas, roadways and streets, storage piles or material handling in excess of 40 % opacity measured in accordance with the Arizona Testing Manual, Reference Method 9. [A.A.C. R18-2-610]

b. Permittee shall employ reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne:

(1) Use approved dust suppressants, adhesive soil stabilizer, paving, covering, detouring, landscaping, or wetting agents on, or bar access to open areas during construction operations, repair operations, demolition activities, clearing operations, and leveling operations, or when any earth is moved or excavated; [A.A.C. R18-2-604.A]

(2) Use approved dust suppressants, adhesive soil stabilizer, or paving on, or bar access to vacant lots where motor vehicular activity occurs; [A.A.C. R18-2-604.B]

(3) Use approved dust suppressants, temporary paving, detouring or wetting agents when a roadway is repaired, constructed, or reconstructed; [A.A.C. R18-2-605.A]

(4) Use dust suppressants, wetting agents, or cover the load adequately when transporting material likely to give rise to airborne dust; [A.A.C. R18-2-605.B and 606]

(5) Use spray bars, hoods, wetting agents, dust suppressants, or cover when crushing, handling, or conveying material that is likely to give rise to airborne dust; [A.A.C. R18-2-606]

(6) Adequately cover, or use wetting agents, chemical stabilization, or dust suppressants when stacking, piling, or otherwise storing organic or inorganic dust producing material; [A.A.C. R18-2-607.A]

(7) Operate stacking and reclaiming machinery utilized at storage piles at all times with a minimum fall of material or with the use of spray bars and wetting agents; [A.A.C. R18-2-607.B]

(8) Use wetting agents or dust suppressants before the cleaning of site, roadway, or alley. Earth or other material shall be removed from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water or by other means; or [A.A.C. R18-2-804.B]

(9) Any other method as proposed by the Permittee and approved by the Director.

2. Open Burning [A.A.C. R18-2-602]

Except as provided in A.A.C. R18-2-602.C(1), C(3), and C(4), and except when permitted to do so by either ADEQ or the local officer delegated the authority for issuance of open burning

permits the Permittee shall not conduct open burning.

C. Other Periodic Activities

1. Abrasive Blasting

a. The Permittee shall not cause or allow sandblasting or other abrasive blasting without minimizing dust emissions to the atmosphere through the use of good modern practices. Good modern practices include:

(1) wet blasting;
(2) effective enclosures with necessary dust collecting equipment; or
(3) other measures approved by the Director. [A.A.C. R18-2-726]

b. Permittee shall not cause, allow or permit visible emissions from sandblasting or other abrasive blasting operations in excess of 40% opacity as measured by EPA Reference Method 9.

[A.A.C. R18-2-702.B.1]

2. Use of Paints

While performing spray painting operations the Permittee shall comply with the following requirements:

a. The Permittee shall not conduct any spray painting operation without minimizing organic solvent emissions. Such operations other than architectural coating and spot painting, shall be conducted in an enclosed area equipped with controls containing no less than 96 percent of the overspray. [A.A.C. R18-2-727.A]

b. The Permittee shall not either:

(1) Employ, apply, evaporate or dry any architectural coating containing photochemically reactive solvents for industrial or commercial purposes; or

(2) Thin or dilute any architectural coating with a photochemically reactive solvent.

[A.A.C. R18-2-727.B]

c. For the purposes of parts b. and e. of this condition, a photochemically reactive solvent shall be any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified in paragraphs (1) through (3) of this subsection, or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:

(1) A combination of the following types of compounds having an olefinic or cyclo-olefinic type of unsaturation - hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones: five percent

(2) A combination of aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene: eight percent

(3) A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent [A.A.C. R18-2-727.C]

d. Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the groups or organic compounds described in subsection c(1) through c(3) of this condition, it shall be considered to be a member of the group having the least allowable percent of the total volume of solvents. [A.A.C. R18-2-727.D]

e. Permittee shall not dispose by evaporation more than 1.5 gallons of photochemically reactive solvent in any one day. [SIP Provision R9-3-527.C]

f. Visible emissions from spray painting operations shall not have an opacity greater than 40%, as measured by EPA Reference Method 9. [A.A.C. R18-2-702.B]

3. Solvent Degreasing

Permittee shall process, store, use, and transport materials including solvents or volatile compounds in such a manner and by such means that they will not evaporate, leak, escape, or be otherwise discharged into the atmosphere so as to cause or contribute to air pollution. Where means are available to reduce effectively the contribution to air pollution from evaporation, leakage, or discharge, the installation and usage of such control methods, devices, or equipment shall be mandatory. [A.A.C. R18-2-730.F]

4. Mobile Sources

a. Classification

The requirements of this condition are applicable to mobile sources which either move while emitting air contaminants or are frequently moved during the course of their utilization but are not classified as motor vehicles, agricultural vehicles, or agricultural equipment used in normal farm operations. Mobile sources shall not include portable sources as defined in A.A.C. R18-2-101.84. [A.A.C. R18-2-801]

b. Off-road Machinery

Permittee shall not cause, allow, or permit to be emitted into the atmosphere from any off-road machinery, smoke for any period greater than ten consecutive seconds, the opacity of which exceeds 40 percent. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes. Off-road machinery shall include trucks, graders, scrapers, rollers and other construction and mining machinery not normally driven on a completed public roadway. [A.A.C. R18-2-802]

c. Roadway and Site Cleaning Machinery

Permittee shall not cause, allow or permit to be emitted into the atmosphere from any roadway and site cleaning machinery smoke or dust for any period greater than ten consecutive seconds, the opacity of which exceeds 40 percent. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes.

[A.A.C. R18-2-804.A]

5. Demolition/Renovation

   The Permittee shall comply with the applicable requirements of 40 CFR 61, Subpart M (National Emissions Standards for Hazardous Air Pollutants - Asbestos). [A.A.C. R18-2-1101.A.8]

6. Nonvehicle Air Conditioner Maintenance and/or Services

   The Permittee shall comply with the applicable requirements of 40 CFR 82 - Subpart F (Protection of Stratospheric Ozone - Recycling and Emissions Reduction). [40 CFR 82, Subpart F]

II. MONITORING, RECORD KEEPING AND REPORTING REQUIREMENTS

A. At the time the compliance certifications required by Section VII of Attachment "A" are submitted, the Permittee shall submit reports of all monitoring activities required by Section II of this Attachment performed in the same six month period as applies to the compliance certification period.
[A.A.C. R18-2-306.A.5.a]

B. G.E. Simple Cycle Combustion Turbine (S/N 214472) and Startup Diesel Engine
[A.A.C. R18-2-306.A.3.b and 306.A.4]

1. Particulate Matter and Sulfur Dioxide

   a. Permittee shall keep on record a copy of the fuel oil purchase specification sheet. This specification sheet shall include:

      (1) The heating value (Btu per gallon fuel);
      (2) The density of the fuel oil (lbs per gallon);
      (3) The ash content of the fuel oil (weight percentage, wt%);
      (4) The sulfur content (sulfur weight percentage);
      (5) The method used to determine the sulfur content of the fuel oil;
      (6) The method used to determine the ash content of the fuel oil.

   b. Permittee shall use the following equation to perform sulfur dioxide emission calculations for each shipment. Permittee shall maintain a record of these calculations.

      SO_2 (lb/MMBtu) = 2.0x[(Weight percentage of sulfur/100) x Density (lbs/gal)]/[(Heating value (Btu/gal)) x (1 MMBtu/1,000,000 Btu)]

   c. Permittee shall report to the Director any daily period during which sulfur content of the fuel oil being fired in the machine exceeds 0.8 percent. [A.A.C. R18-2-719.J]

   d. Permittee shall maintain a vendor-provided copy of that part of the Federal Energy Regulatory Commission (FERC)-approved Tariff agreement that contains the sulfur content and the lower heating value of the pipeline quality natural gas. [A.A.C. R18-2-719.I]

2. Visible Emissions

a. Within 180 days of issuance of this permit the owner or operator shall have on staff a person that is certified in EPA Reference Method 9. [A.A.C. R18-2-306.A.3.b]

b. Permittee shall monitor opacity according to the following schedule:

(1) If fuel oil is burned in the unit continuously for a time period greater than 72 hours but less than 168 hours, one opacity reading will be observed at the exit of the unit's stack.

(2) If fuel oil is burned in the unit continuously for a time period greater than 168 hours, at least one opacity reading will be observed at the exit of the unit's stack during each 168 hour period.

c. All opacity readings will be observed in accordance with EPA Reference Method 9. Permittee shall log in ink or in an electronic format and maintain a record of the opacity readings from paragraph II.B.2.b above and the dates and number of hours that fuel oil is burned continuously.

3. Dates and Hours of Operation

a. Permittee shall record the dates and hours during which the unit is in operation. Performance tests shall be triggered for nitrogen oxides and carbon monoxide after 968 hours of turbine operation on a 12-month rolling total basis. The tests shall be performed within 6 months of the trigger date.

b. After completion of the performance test, the permittee shall record hours of operation in accordance with paragraph II.B.2.c of this attachment.

C. Non-Point Sources [A.A.C. R18-2-306.A.3.b and 306.A.4]

1. Open Areas, Roadways & Streets, Storage Piles and Material Handling

Permittee shall maintain records of the dates on which any of the activities listed in I.B.1.b.(1) through (9) of this Attachment were performed and control measures employed.

2. Open Burning

The monitoring requirements for I.B.2 of this Attachment may be complied with by maintaining copies of all open burning permits on file.

D. Other Periodic Activities

1. Abrasive Blasting

Each time an abrasive blasting project is conducted, the Permittee shall log in ink or in an electronic format, a record of the following:

a. The date the project was conducted;
b. The duration of the project; and
c. Type of control measures employed.

2. Use of Paints

   a. Each time a spray painting project is conducted, the Permittee shall log in ink or in an electronic format, a record of the following:

      (1) The date the project was conducted;
      (2) The duration of the project;
      (3) Type of control measures employed; and
      (4) Material Safety Data Sheets for all paints and solvents used in the project shall be maintained on file.

   b. Architectural coating and spot painting projects shall be exempt from the record keeping requirements of part a. above.

3. Mobile Sources

   Permittee shall keep a record of all emission related maintenance activities as per manufacturer's specifications performed on Permittee's mobile sources stationed at the facility.

4. Demolition/Renovation

   As a means of demonstrating compliance with condition I.C.5 of this Attachment, the Permittee shall keep a record of all relevant paperwork on file. The relevant paperwork shall include but not be limited to the "NESHAP Notification for Renovation and Demolition Activities" form, and all supporting documents.

5. Nonvehicle Air Conditioner Maintenance and/or Services

   As a means of demonstrating compliance with condition I.C.6 of this Attachment, the Permittee shall keep a record of all relevant paperwork to the applicable requirements of 40 CFR 82 - Subpart F on file.

III. TESTING REQUIREMENTS [A.A.C. R18-2-306.A.3]

A. Permittee shall conduct performance tests for nitrogen oxides and carbon monoxide on the turbine according to the schedule given in Section II.B.3 of this attachment.

B. Permittee shall use the USEPA Reference Methods 20 and 10 to conduct performance testing for nitrogen oxides and carbon monoxide respectively as specified in the Arizona Testing Manual for Air Pollutant Emissions.

ATTACHMENT "C": APPLICABLE REQUIREMENTS

Air Quality Control Permit No. 1000149
For
Arizona Public Service Company - Fairview Generating Station

REQUIREMENTS SPECIFICALLY IDENTIFIED AS APPLICABLE

Compliance with the terms contained in this permit shall be deemed compliance with the following federally applicable requirements in effect on the date of permit issuance:

ARIZONA ADMINISTRATIVE CODE (A.A.C.) TITLE 18, Chapter 2

ARTICLE 6. EMISSIONS FROM EXISTING AND NEW NON-POINT SOURCES

R18-2-601	General
R18-2-602	Unlawful Open Burning
R18-2-604.A	Open Areas, Dry Washes, or Riverbeds
R18-2-604.B	Open Areas, Dry Washes, or Riverbeds
R18-2-605	Roadways and Streets
R18-2-606	Material Handling
R18-2-607	Storage Piles
R18-2-610	Evaluation of Non-point Source Emissions

ARTICLE 7. EXISTING STATIONARY SOURCE PERFORMANCE STANDARDS

R18-2-702.B	General Provisions
R18-2-719.B	Standards of Performance for Existing Stationary Rotating Machinery
R18-2-719.C.1	Standards of Performance for Existing Stationary Rotating Machinery
R18-2-719.E	Standards of Performance for Existing Stationary Rotating Machinery
R18-2-719.F	Standards of Performance for Existing Stationary Rotating Machinery
R18-2-719.H	Standards of Performance for Existing Stationary Rotating Machinery
R18-2-719.I	Standards of Performance for Existing Stationary Rotating Machinery
R18-2-719.J	Standards of Performance for Existing Stationary Rotating Machinery
R18-2-726	Standards of Performance for Sandblasting Operations
R18-2-727	Standards of Performance for Spray Painting Operations
SIP R9-2-527.C	Standards of Performance for Spray Painting Operations
R18-2-730.F	Standards of Performance for Unclassified Sources

ARTICLE 8. EMISSIONS FROM MOBILE SOURCES (NEW AND EXISTING)

R18-2-802	Off-road Machinery
R18-2-804	Roadway and Site Cleaning Machinery

ARTICLE 11. FEDERAL HAZARDOUS AIR POLLUTANTS

R18-2-1101.A.8	Subpart M - Asbestos

STRATOSPHERIC OZONE PROTECTION

40 CFR 82 Subpart F - Recycling and Reducing Emissions

REQUIREMENTS SPECIFICALLY IDENTIFIED AS NOT APPLICABLE

Compliance with the terms contained in this permit shall be deemed compliance with the following federally applicable requirements in effect on the date of permit issuance:

As requested by the Permittee, one specific non-applicable requirement has been identified as follows. A permit shield is granted from this requirement.

NEW SOURCE PERFORMANCE STANDARDS - 40 CFR 60

40 CFR 60, Subpart GG New Source Performance Standards - Stationary Gas Turbines

ATTACHMENT "D": EQUIPMENT LIST

Air Quality Control Permit No. 1000149
For
Arizona Public Service Company - Fairview Generating Station

Permitted Equipment					
Equipment ID	**Description**	**Size**	**Serial Number**	**Model**	**Date of Manufacture/ Installation**
Combustion Turbine	Simple cycle combustion turbine generator	20.95 MW	214472	General Electric Company Frame 5	March 31, 1972
Starting Diesel Engine	12 Cylinder diesel starting engine	500 hp	12VA026309	Detroit Diesel N 71237000	March 31, 1972 (installation)
Non-point Sources	--	--	--	--	--
Sand Blasting	--	--	--	--	--
Spray Painting	--	--	--	--	--
Pumps and Compressors	Turbine Lube Oil Pump Motor	--	HG-1-192	CD 218 AP	--
	Turbine Ratchet Pump	--	--	22B-1E-1B-22-L20	--
	Fuel Forwarding Pump AC Motor	--	--	UT-TE	--
	Fuel Forwarding Pump DC Motor	--	SG-8-475-SG	--	--
	Diesel Unloading Pump	--	62-07517-833		
Demolition and Renovation	--	--	--	--	--

ATTACHMENT "E": INSIGNIFICANT ACTIVITIES

Air Quality Control Permit No. 1000149
For
Arizona Public Service Company - Fairview Generating Station

Source No.	Potential Emission Points Classified as "Insignificant Activities" Pursuant to A.A.C. R18-2-101.54
1	Accidental Fires
2	Acetylene, Butane, Propane Torches in quantities less than in 10,000 lbs. each
3	Activities Associated with Maintenance Repair or Dismantlement of an Emission Unit or other Equipment
4	Aerosol Can Usage
5	Brazing and Soldering Activities
6	Cathodic Protection
7	Chemical Storage Barrels
8	Corona
9	Electric Motors
10	Emissions Sampling and Associated Activities
11	Evaporative Coolers
12	Facilities used for Preparing Food
13	Fire Fighting Activities
14	Flares Used to Indicate Danger to the Public
15	Fuel Oil Piping Systems Including: Flanges, Valves, Pump Seals, Pressure Relief Valves and other Individual Components
16	Combustion Turbine False Start Drains
17	Combustion Turbine Lube Oil Vents
18	Hydraulic System Reservoirs
19	Janitorial Activities
20	Lube Oil Storage Area (New Product)
21	Medical Activities
22	Normal Usage of Misc. Consumer Products
23	Oil Circuit Breakers

24	Oil Filter Draining
25	Portable Testing Equipment and Testing Activities
26	Portable Welder
27	Production of Hot Water Not Related to Industrial Process
28	Pump/Motor Oil Reservoirs
29	PVC/ABS Pipe Welding
30	Safety Devices, Fire Extinguishers and Cardox Systems
31	Satellite Accumulation Barrels
32	Service Water and Piping Water Vapors
33	Small Equipment Fueling Area
34	Smoking Areas
35	Station Transformers
36	Steam Cleaners
37	Storage Tank, 20,000 bbls, Diesel Fuel Oil #2
38	Storm Water Drainage Area
39	Used Oil Storage Area
40	Welding
41	Portable Toilet